



SEQUENCE LISTING

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TECH CENTER 1600/2900

<110> Michael E. Mendelsohn

<120> METHOD FOR ASSAYING COMPOUNDS AFFECTING
CELL DIVISION

<130> 00398/506001

<140> 09/352,570

<141> 1999-07-13

<160> 7

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 618

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)...(618)

<400> 1

atg gcg ctg cag ctc tcc cgg gag cag gga atc acc ctg cgc ggg agc 48
Met Ala Leu Gln Leu Ser Arg Glu Gln Gly Ile Thr Leu Arg Gly Ser
1 5 10 15

gcc gaa atc gtg gcc gag ttc ttc tca ttc ggc atc aac agc att tta 96
Ala Glu Ile Val Ala Glu Phe Phe Ser Phe Gly Ile Asn Ser Ile Leu
20 25 30

tat cag cgt ggc ata tat cca tct gaa acc ttt act cga gtg cag aaa 144
Tyr Gln Arg Gly Ile Tyr Pro Ser Glu Thr Phe Thr Arg Val Gln Lys
35 40 45

tac gga ctc acc ttg ctt gta act act gat ctt gag ctc ata aaa tac 192
Tyr Gly Leu Thr Leu Leu Val Thr Thr Asp Leu Glu Leu Ile Lys Tyr
50 55 60

cta aat aat gtg gtg gaa caa ctg aaa gat tgg tta tac aag tgt tca 240
Leu Asn Asn Val Val Glu Gln Leu Lys Asp Trp Leu Tyr Lys Cys Ser
65 70 75 80

gtt cag aaa ctg gtt gta gtt atc tca aat att gaa agt ggt gag gtc 288
Val Gln Lys Leu Val Val Val Ile Ser Asn Ile Glu Ser Gly Glu Val
85 90 95

ctg gaa aga tgg cag ttt gat att gag tgt gac aag act gca aaa gat 336
Leu Glu Arg Trp Gln Phe Asp Ile Glu Cys Asp Lys Thr Ala Lys Asp
100 105 110

gac agt gca ccc aga gaa aag tct cag aaa gct atc cag gat gaa atc 384
Asp Ser Ala Pro Arg Glu Lys Ser Gln Lys Ala Ile Gln Asp Glu Ile

115	120	125	
cgt tca gtg atc aga cag atc aca gct acg gtg aca ttt ctg cca ctg			432
Arg Ser Val Ile Arg Gln Ile Thr Ala Thr Val Thr Phe Leu Pro Leu			
130	135	140	
ttg gaa gtt tct tgt tca ttt gat ctg ctg att tat aca gac aaa gat			480
Leu Glu Val Ser Cys Ser Phe Asp Leu Leu Ile Tyr Thr Asp Lys Asp			
145	150	155	160
ttg gtt gta cct gaa aaa tgg gaa gag tcg gga cca cag ttt att acc			528
Leu Val Val Pro Glu Lys Trp Glu Glu Ser Gly Pro Gln Phe Ile Thr			
165	170		175
aat tct gag gaa gtg cgc ctt cgt tca ttt act act aca atc cac aaa			576
Asn Ser Glu Glu Val Arg Leu Arg Ser Phe Thr Thr Thr Ile His Lys			
180	185		190
gta aat agc atg gtg gcc tac aaa att cct gtc aat gac tga			618
Val Asn Ser Met Val Ala Tyr Lys Ile Pro Val Asn Asp *			
195	200	205	

<210> 2
 <211> 199
 <212> PRT
 <213> Homo sapiens

C1

<400> 2	
Arg Glu Gln Gly Ile Thr Leu Arg Gly Ser Ala Glu Ile Val Ala Glu	
1	5
Phe Phe Ser Phe Gly Ile Asn Ser Ile Leu Tyr Gln Arg Gly Ile Tyr	
20	25
Pro Ser Glu Thr Phe Thr Arg Val Gln Lys Tyr Gly Leu Thr Leu Leu	
35	40
Val Thr Thr Asp Leu Glu Leu Ile Lys Tyr Leu Asn Asn Val Val Glu	
50	55
Gln Leu Lys Asp Trp Leu Tyr Lys Cys Ser Val Gln Lys Leu Val Val	
65	70
Val Ile Ser Asn Ile Glu Ser Gly Glu Val Leu Glu Arg Trp Gln Phe	
85	90
Asp Ile Glu Cys Asp Lys Thr Ala Lys Asp Asp Ser Ala Pro Arg Glu	
100	105
Lys Ser Gln Lys Ala Ile Gln Asp Glu Ile Arg Ser Val Ile Arg Gln	
115	120
Ile Thr Ala Thr Val Thr Phe Leu Pro Leu Leu Glu Val Ser Cys Ser	
130	135
Phe Asp Leu Leu Ile Tyr Thr Asp Lys Asp Leu Val Val Pro Glu Lys	
145	150
Trp Glu Glu Ser Gly Pro Gln Phe Ile Thr Asn Ser Glu Glu Val Arg	
165	170
Leu Arg Ser Phe Thr Thr Thr Ile His Lys Val Asn Ser Met Val Ala	
180	185
Tyr Lys Ile Pro Val Asn Asp	
195	

<210> 3
 <211> 600
 <212> DNA
 <213> Ovis aries

<220>
 <221> CDS
 <222> (1)...(600)

<400> 3
 cgg gag caa ggc atc acc ttg cgc ggg agc gcc gag atc gtg gcc gag 48
 Arg Glu Gln Gly Ile Thr Leu Arg Gly Ser Ala Glu Ile Val Ala Glu
 1 5 10 15

ttc ttc tca ttt ggt atc aac agt att tta tat cag cgt ggc ata tat 96
 Phe Phe Ser Phe Gly Ile Asn Ser Ile Leu Tyr Gln Arg Gly Ile Tyr
 20 25 30

cca tcg gaa acc ttt act cga gtg cag aaa tat gga ctc acc ttg ctt 144
 Pro Ser Glu Thr Phe Thr Arg Val Gln Lys Tyr Gly Leu Thr Leu Leu
 35 40 45

gta act act gat cct gag ctc ata aaa tac cta aat aat gtg gtg gat 192
 Val Thr Thr Asp Pro Glu Leu Ile Lys Tyr Leu Asn Asn Val Val Asp
 50 55 60

caa cta aaa gaa tgg tta tac aag tgt tca gtt cag aaa ctg gtg gta 240
 Gln Leu Lys Glu Trp Leu Tyr Lys Cys Ser Val Gln Lys Leu Val Val
 65 70 75 80

C1 gtc atc tca aat att gaa agt gga gag gtc ctt gaa aga tgg cag ttt 288
 Val Ile Ser Asn Ile Glu Ser Gly Glu Val Leu Glu Arg Trp Gln Phe
 85 90 95

gat att gag tgt gac aag act gca aaa gat gac agt gca ccc aga gaa 336
 Asp Ile Glu Cys Asp Lys Thr Ala Lys Asp Asp Ser Ala Pro Arg Glu
 100 105 110

aag tct cag aaa gct atc caa gat gaa atc cgt tca gtg atc aga cag 384
 Lys Ser Gln Lys Ala Ile Gln Asp Glu Ile Arg Ser Val Ile Arg Gln
 115 120 125

atc aca gct aca gta aca ttt ctg cca ctg ttg gaa gtt tct tgt tca 432
 Ile Thr Ala Thr Val Thr Phe Leu Pro Leu Leu Glu Val Ser Cys Ser
 130 135 140

ttt gat ctc ctc att tat aca gac aaa gat ctg gtt gta cct gag aaa 480
 Phe Asp Leu Leu Ile Tyr Thr Asp Lys Asp Leu Val Val Pro Glu Lys
 145 150 155 160

tgg gaa gag tcc gga cca cag ttc att acc aat tct gaa gaa gtt cgt 528
 Trp Glu Glu Ser Gly Pro Gln Phe Ile Thr Asn Ser Glu Glu Val Arg
 165 170 175

ctt cgt tca ttc act act aca att cac aaa gta aat agc atg gta gcc 576
 Leu Arg Ser Phe Thr Thr Thr Ile His Lys Val Asn Ser Met Val Ala
 180 185 190

tac aaa att cct gtc cat gac tga
 Tyr Lys Ile Pro Val His Asp *
 195

600

<210> 4
 <211> 199
 <212> PRT
 <213> Ovis aries

<400> 4
 Arg Glu Gln Gly Ile Thr Leu Arg Gly Ser Ala Glu Ile Val Ala Glu
 1 5 10 15
 Phe Phe Ser Phe Gly Ile Asn Ser Ile Leu Tyr Gln Arg Gly Ile Tyr
 20 25 30
 Pro Ser Glu Thr Phe Thr Arg Val Gln Lys Tyr Gly Leu Thr Leu Leu
 35 40 45
 Val Thr Thr Asp Pro Glu Leu Ile Lys Tyr Leu Asn Asn Val Val Asp
 50 55 60
 Gln Leu Lys Glu Trp Leu Tyr Lys Cys Ser Val Gln Lys Leu Val Val
 65 70 75 80
 Val Ile Ser Asn Ile Glu Ser Gly Glu Val Leu Glu Arg Trp Gln Phe
 85 90 95
 Asp Ile Glu Cys Asp Lys Thr Ala Lys Asp Asp Ser Ala Pro Arg Glu
 100 105 110
 Lys Ser Gln Lys Ala Ile Gln Asp Glu Ile Arg Ser Val Ile Arg Gln
 115 120 125
 Ile Thr Ala Thr Val Thr Phe Leu Pro Leu Leu Glu Val Ser Cys Ser
 130 135 140
 Phe Asp Leu Leu Ile Tyr Thr Asp Lys Asp Leu Val Val Pro Glu Lys
 145 150 155 160
 Trp Glu Glu Ser Gly Pro Gln Phe Ile Thr Asn Ser Glu Glu Val Arg
 165 170 175
 Leu Arg Ser Phe Thr Thr Thr Ile His Lys Val Asn Ser Met Val Ala
 180 185 190
 Tyr Lys Ile Pro Val His Asp
 195

<210> 5
 <211> 1458
 <212> DNA
 <213> Mus musculus

<400> 5
 atggcattct acagtcctgc tgtgatgaac tacagtgttc ccagcagcac cggtaacctg 60
 gaagggtgggc ctgttcgcca gactgcaagc ccaaagtgtgc tatggccaac ttctggacac 120
 ctctctcctt tagccacca ctgccaatca tcgcttctct atgcagaacc tcaaaagagt 180
 ccttggtgtg aagcaagatc actagaacac accttgccctg taaacagaga gacctgaag 240
 aggaagcttg gcgggagcgg ttgtgccagc cctgttacta gtccaagcac caagagggat 300
 gctcaattct gtgccgtctg cagtgattat gcatctgggt atcattacgg tgtctgggtcc 360
 tgtgaaggat gtaaggcctt ttttaaaaga agcattcaag gacataatga ctatatctgt 420
 ccagccacga atcagtgtac gatagacaag aaccggcgta aaaactgccg ggctgcccga 480
 cttcgcaagt gttacgaagt aggaatgggt aagtgtggat ccaggagaga aagggtgtggg 540
 taccgaatag tacgaagaca gagaagtgcc agcgagcagg tgcattgcct gaacaaagcc 600
 aagagaacca gtgggcacac accccgggtg aaggagctac tgctgaactc tctgagtcctc 660
 gagcagctgg tgctcaccct gctggaagct gagccacca atgtgctagt gagtcgtccc 720
 agcatgccct tcaccgaggc ctccatgatg atgtccctta cgaagctggc tgacaaggaa 780

ctggtgcaca tgattggctg ggccaagaaa atccctggct ttgtggagct cagcctgttg 840
 gaccaagtcc gcctcttggg aagctgctgg atggagggtgc tgatgggtggg gctgatgtgg 900
 cgctccatcg accaccccg gcaagctcatc tttgctccag acctcggttct ggacagggat 960
 gaggggaagt gcgtggaagg gattctggaa atctttgaca tgctcctggc gacgacggca 1020
 cggttccgtg agttaaact gcagcacaaa gaatatctgt gtgtgaaggc catgattctc 1080
 ctcaactcca gtatgtacca cttggctacc gcaagccagg aagcagagag tagccggaag 1140
 ctgacacacc tattgaacgc agtgacagat gccctgggtct ggggtgatttc gaagagtaga 1200
 atctcttccc agcagcagtc agtccgtctg gccaacctcc tgatgcttct ttctcatgtc 1260
 aggacatca gtaacaaggg catggaacat ctgctcagca tgaagtgcaa aaatgtggtc 1320
 ccggtgtacg acctgctgct ggagatgctg aatgctcaca cgcttcgagg gtacaagtcc 1380
 tcaatctcgg ggtctgggtg ctgctcgaca gaggacagta agagcaaaga gggctcccag 1440
 aacctccagt ctcagtga 1458

<210> 6
 <211> 485
 <212> PRT
 <213> Mus musculus

<400> 6
 Met Ala Phe Tyr Ser Pro Ala Val Met Asn Tyr Ser Val Pro Ser Ser
 1 5 10 15
 Thr Gly Asn Leu Glu Gly Gly Pro Val Arg Gln Thr Ala Ser Pro Asn
 20 25 30
 Val Leu Trp Pro Thr Ser Gly His Leu Ser Pro Leu Ala Thr His Cys
 35 40 45
 Gln Ser Ser Leu Leu Tyr Ala Glu Pro Gln Lys Ser Pro Trp Cys Glu
 50 55 60
 Ala Arg Ser Leu Glu His Thr Leu Pro Val Asn Arg Glu Thr Leu Lys
 65 70 75 80
 Arg Lys Leu Gly Gly Ser Gly Cys Ala Ser Pro Val Thr Ser Pro Ser
 85 90 95
 Thr Lys Arg Asp Ala His Phe Cys Ala Val Cys Ser Asp Tyr Ala Ser
 100 105 110
 Gly Tyr His Tyr Gly Val Trp Ser Cys Glu Gly Cys Lys Ala Phe Phe
 115 120 125
 Lys Arg Ser Ile Gln Gly His Asn Asp Tyr Ile Cys Pro Ala Thr Asn
 130 135 140
 Gln Cys Thr Ile Asp Lys Asn Arg Arg Lys Asn Cys Gln Ala Cys Arg
 145 150 155 160
 Leu Arg Lys Cys Tyr Glu Val Gly Met Val Lys Cys Gly Ser Arg Arg
 165 170 175
 Glu Arg Cys Gly Tyr Arg Ile Val Arg Arg Gln Arg Ser Ala Ser Glu
 180 185 190
 Gln Val His Cys Leu Asn Lys Ala Lys Arg Thr Ser Gly His Thr Pro
 195 200 205
 Arg Val Lys Glu Leu Leu Leu Asn Ser Leu Ser Pro Glu Gln Leu Val
 210 215 220
 Leu Thr Leu Leu Glu Ala Glu Pro Pro Asn Val Leu Val Ser Arg Pro
 225 230 235 240
 Ser Met Pro Phe Thr Glu Ala Ser Met Met Met Ser Leu Thr Lys Leu
 245 250 255
 Ala Asp Lys Glu Leu Val His Met Ile Gly Trp Ala Lys Lys Ile Pro
 260 265 270
 Gly Phe Val Glu Leu Ser Leu Leu Asp Gln Val Arg Leu Leu Glu Ser
 275 280 285
 Cys Trp Met Glu Val Leu Met Val Gly Leu Met Trp Arg Ser Ile Asp
 290 295 300
 His Pro Gly Lys Leu Ile Phe Ala Pro Asp Leu Val Leu Asp Arg Asp

305 310 315 320
 Glu Gly Lys Cys Val Glu Gly Ile Leu Glu Ile Phe Asp Met Leu Leu
 325 330 335
 Ala Thr Thr Ala Arg Phe Arg Glu Leu Lys Leu Gln His Lys Glu Tyr
 340 345 350
 Leu Cys Val Lys Ala Met Ile Leu Leu Asn Ser Ser Met Tyr His Leu
 355 360 365
 Ala Thr Ala Ser Gln Glu Ala Glu Ser Ser Arg Lys Leu Thr His Leu
 370 375 380
 Leu Asn Ala Val Thr Asp Ala Leu Val Trp Val Ile Ser Lys Ser Arg
 385 390 395 400
 Ile Ser Ser Gln Gln Gln Ser Val Arg Leu Ala Asn Leu Leu Met Leu
 405 410 415
 Leu Ser His Val Arg His Ile Ser Asn Lys Gly Met Glu His Leu Leu
 420 425 430
 Ser Met Lys Cys Lys Asn Val Val Pro Val Tyr Asp Leu Leu Glu
 435 440 445
 Met Leu Asn Ala His Thr Leu Arg Gly Tyr Lys Ser Ser Ile Ser Gly
 450 455 460
 Ser Gly Cys Cys Ser Thr Glu Asp Ser Lys Ser Lys Glu Gly Ser Gln
 465 470 475 480
 Asn Leu Gln Ser Gln
 485

<210> 7
 <211> 42
 <212> PRT
 <213> Mus musculus

<400> 7
 Gly Ser Arg Arg Glu Arg Cys Gly Tyr Arg Ile Val Arg Arg Gln Arg
 1 5 10 15
 Ser Ala Ser Glu Gln Val His Cys Leu Asn Lys Ala Lys Arg Thr Ser
 20 25 30
 Gly His Thr Pro Arg Val Lys Glu Leu Leu
 35 40
